

epithelial cells; [and]

obtaining milk from [the] said non-human transgenic mammal, wherein at least 30% of [the] said PDGF in the milk is [as a dimer.] in a physiologically active dimer form; and,

wherein an insulator sequence is inserted on either side of said nucleic acid sequence encoding PDGF to be transcribed.

2. The method of claim 1, wherein the nucleic acid sequence encodes a PDGF A chain and at least 30% of the dimerized PDGF in the milk is as a PDGF-AA homodimer.
3. The method of claim 1, wherein the nucleic acid sequence encodes a PDGF B chain and at least 30% of the dimerized PDGF in the milk is as a PDGF-BB homodimer.
4. The method of claim 1, wherein the nucleic acid sequence comprises a nucleic acid sequence encoding a PDGF A chain and a nucleic acid sequence encoding a PDGF-B chain[.] wherein at least 30% of said physiologically active PDGF molecule is a heterodimer.
5. The method of claim 4, wherein the nucleic acid sequence encoding the PDGF A chain and the nucleic acid sequence encoding the PDGF B chain are under control of the same promoter.
6. The method of claim 4, wherein the nucleic acid sequence encoding the PDGF A chain is operably linked to a different promoter than the nucleic acid sequence encoding the PDGF B chain.

7. The method of claim 1, wherein the transgenic non-human mammal comprises a nucleic acid sequence encoding a PDGF A chain and a nucleic acid sequence encoding a PDGF B chain.

8. A method of producing a transgenic non-human mammal capable of expressing an active PDGF molecule in its milk, comprising

introducing into a fertilized egg [cell] a nucleic acid sequence encoding a PDGF chain[s] operably linked to a promoter which [directed] directs expression in mammary epithelial cells; [and]

allowing [the cell] said fertilized egg to give rise to a transgenic non-human mammal, wherein [the] said transgenic non-human mammal expresses PDGF in its milk and at least 30% of the PDGF is present in the milk is in a physiologically active dimer form; [active form.]

wherein an insulator sequence is inserted on either side of said nucleic acid sequence encoding PDGF to be transcribed; and,

wherein said physiologically active PDGF molecule is glycosylated.

9. The method of claim 8, wherein the cell is an oocyte.

11. A method of producing a transgenic non-human mammal capable of expressing an active PDGF molecule in its milk, comprising:

introducing into a [cell] fertilized egg a first nucleic acid sequence encoding a PDGF A chain operably linked to a promoter which directs expression in mammary epithelial cells;

introducing into [the cell] said fertilized egg a second nucleic acid sequence encoding a PDGF B chain operably linked to a promoter

4b, which directs expression in mammary epithelial cells; [and]
allowing [the cell] said fertilized egg to give rise to a transgenic non-human mammal, wherein the transgenic mammal expresses PDGF in its milk and at least 30% of the PDGF is present in the milk in a physiologically active dimer form; [active form.]
wherein said physiologically active PDGF molecule is a heterodimer;
wherein an insulator sequence is inserted on either side of said first and said second nucleic acid sequences encoding PDGF to be transcribed; and,
wherein said physiologically active PDGF molecule is glycosylated.

12. The method of claim 11, wherein the cell is an oocyte.

14. A method of producing a transgenic non-human mammal capable of expressing an active PDGF molecule in its milk, comprising:

providing a [cell] fertilized egg from a transgenic non-human mammal whose germ and somatic cells comprise a first nucleic acid sequence encoding a PDGF-A chain operably linked to a promoter which directs expression in mammary epithelial cells;

introducing into [the cell] said fertilized egg a second nucleic acid sequence encoding a PDGF-B chain operably linked to a promoter which directs expression in mammary epithelial cells; [and]

allowing the cell to give rise to a transgenic non-human mammal, wherein the transgenic mammal expresses PDGF in its milk and at least 30% of the PDGF is present in the milk in active form[.] ;

wherein said active PDGF molecule is a heterodimer;

wherein an insulator sequence is inserted on either side of said first and said

second nucleic acid sequences encoding PDGF to be transcribed; and,
wherein said active PDGF molecule is glycosylated

15. The method of claim 14, wherein the cell is an oocyte.

Please Add New Claims 32-40 as Provided Below

32. (New) The method of claim 8, wherein the nucleic acid sequence encodes a PDGF A chain and at least 30% of the dimerized PDGF in the milk is as a PDGF-AA homodimer.
33. (New) The method of claim 8, wherein the nucleic acid sequence encodes a PDGF B chain and at least 30% of the dimerized PDGF in the milk is as a PDGF-BB homodimer.
34. (New) The method of claim 8, wherein the nucleic acid sequence comprises a nucleic acid sequence encoding a PDGF A chain and a nucleic acid sequence encoding a PDGF-B chain wherein at least 30% of said active PDGF molecule is a heterodimer.
35. (New) The method of either claims 1, 8, 11 or 14, wherein said fertilized egg cell is from an ungulate selected from the group consisting of bovine, ovine, porcine, equine, caprine and buffalo.
36. (New) The method of either claims 1, 8, 11 or 14, wherein said promoter sequence is selected from the group consisting of: caseins, β -lactoglobulin, whey acid promoter, and lactalbumin.